

ABSTRACT

An RF upconverter (400, 500) includes an upconverter core (100), an electrical measurement circuit, and a summing device (406). The upconverter core (100) has an input terminal for receiving a first signal having predetermined spectral content at an input frequency and an output terminal for providing an output signal having substantially the predetermined spectral content at a higher frequency using a local oscillator signal having a carrier frequency. The electrical measurement circuit has an input terminal coupled to the output terminal of the upconverter core (100), and an output terminal for providing a first offset correction signal representative of a power of the output signal at the carrier frequency. The summing device (406) has a positive input terminal for receiving a first input signal, a negative input terminal coupled to the output terminal of the electrical measurement circuit, and an output terminal coupled to the input terminal of the upconverter core (100) for providing the first signal.